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NCBC GULFPORT
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LETTER REGARDING EVALUATION OF THE 55TH AVENUE CULVERT NCBC GULFPORT
MS
9/11/2007
TETRA TECH

To: Art Conrad, Gordon Crane

Subject: 55th Avenue Culvert Investigation

Art:

Based on the MDEQ letter dated September 11, 2007, an evaluation of the 55th Avenue culvert has been completed. The objectives of this investigation were to:

- Locate the culvert and determine if it was part of, or conveyed, surface water originating within the base drainage system.
- Determine the drainage area extent (source) and discharge point(s) related to the subject culvert.
- Locate and evaluate existing analytical data to determine the potential pathways/transport mechanisms to this culvert.
- Assess the value of any additional sampling as referred in the MDEQ letter.

Background information was collected by reviewing the dioxin data from the drainage system (Drainage Area 2) immediately south of 55th Avenue. The existing data was collected in 1997 and the results from 3 samples indicated that this area was not impacted by the migration of contaminants from Site 8 (shown below).

- D2008: 3.5 ppt
- D2007: 1.2 ppt
- D2006: 0.8 ppt

Based on a review of the historical drainage maps, nearly all of the drainage moving through Drainage Area 2 exited the base at Outfall 4, which is 2 blocks east of 55th Ave. Further, the sediment at Outfall 4, including the sediment in the old culvert was removed as part of the Removal Action in 1995. That material is now within the cap at Site 8A.

Field observations were conducted on September 21, 2007. The culvert at 55th Ave. was located and photographed (attached). The culvert is a 12-inch CSP that extends just beyond the footprint of 28th Street. The culvert does NOT extend into the base.

The base fence and 11th Street are 15 feet further south and are approximately 7 feet higher than the culvert at 55th Ave. Base drainage south of 11th Street is conveyed to the west towards Outfall 3.

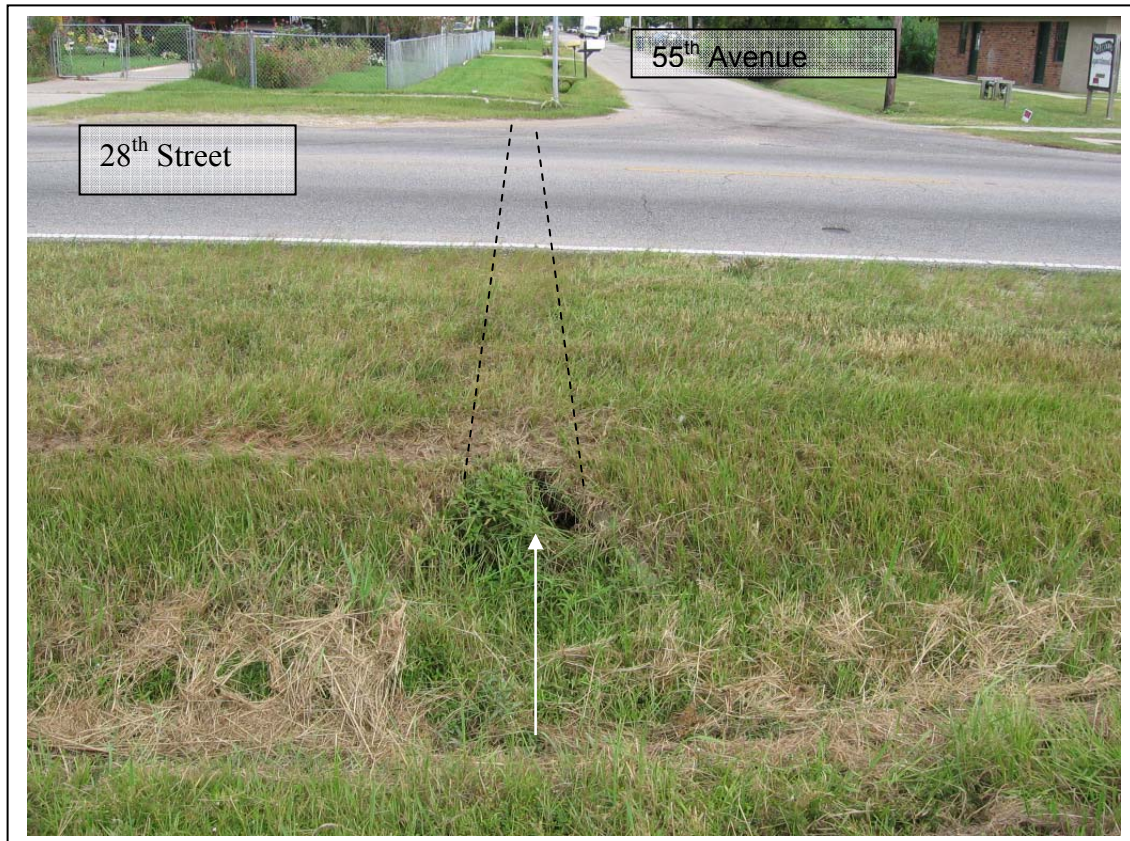
It appears that the culvert drains only a small swale on the south side of 28th Street, extending approximately 100 feet laterally and 15 feet north-south. Surface water from this small drainage area is conveyed north under 28th Street to a buried storm sewer, where it empties into Canal No. 1 at the corner of Canal Rd. and 28th Street.

Based on these observations and past results, the culvert at 55th Ave. is not a base outfall and additional sampling is not warranted. Visual inspection of the northern base boundary did not reveal any additional outfalls.

Sincerely,

Robert Fisher, PG

View to the north. 55th Street is in the background.



View to south from 55th Ave.

